

What Is Claimed Is:

1. A side braze package comprising:
  - a main body having a groove;
  - a lead located at a sidewall of, the main body, the lead being connectable to an external power supply;
  - a first semiconductor chip flip chip bonded on the groove through a solder bump;
  - a second semiconductor chip stacked on the first semiconductor chip;
  - a first through hole formed near an inner sidewall of the groove;
  - a first line connected to the lead through the solder bump and the first through hole;
  - a second line connected to the lead through the first through hole; and
  - a wire to connect a pad of the second semiconductor to the second line.
2. A side braze package as defined in claim 1, wherein the groove is filled with an encapsulant.
3. A side braze package as defined in claim 1, wherein the main body comprises a ceramic material.
4. A side braze package as defined in claim 1, wherein the groove is punctured from an upper portion of the main body to a lower portion of the main body.

5. A side braze package as defined in claim 4 further comprising a support layer fixed at an outer sidewall of the groove, the support layer being positioned substantially parallel to the first semiconductor and supporting the first semiconductor chip.

6. A side braze package as defined in claim 5 further comprising a third semiconductor chip flip chip bonded under the support layer, and a second through hole formed from an upper portion of the main body to a lower portion of the main body near the inner side wall of the groove, wherein the first line is connected to the third semiconductor via the second through hole.

7. A side braze package as defined in claim 6 further comprising a fourth semiconductor chip stacked on the third semiconductor chip, a third through hole being formed from the upper portion of the main body to the lower portion of the main body near the inner sidewall of the groove, and a second wire interconnecting a pad of the fourth semiconductor chip with a third line of the third semiconductor chip.